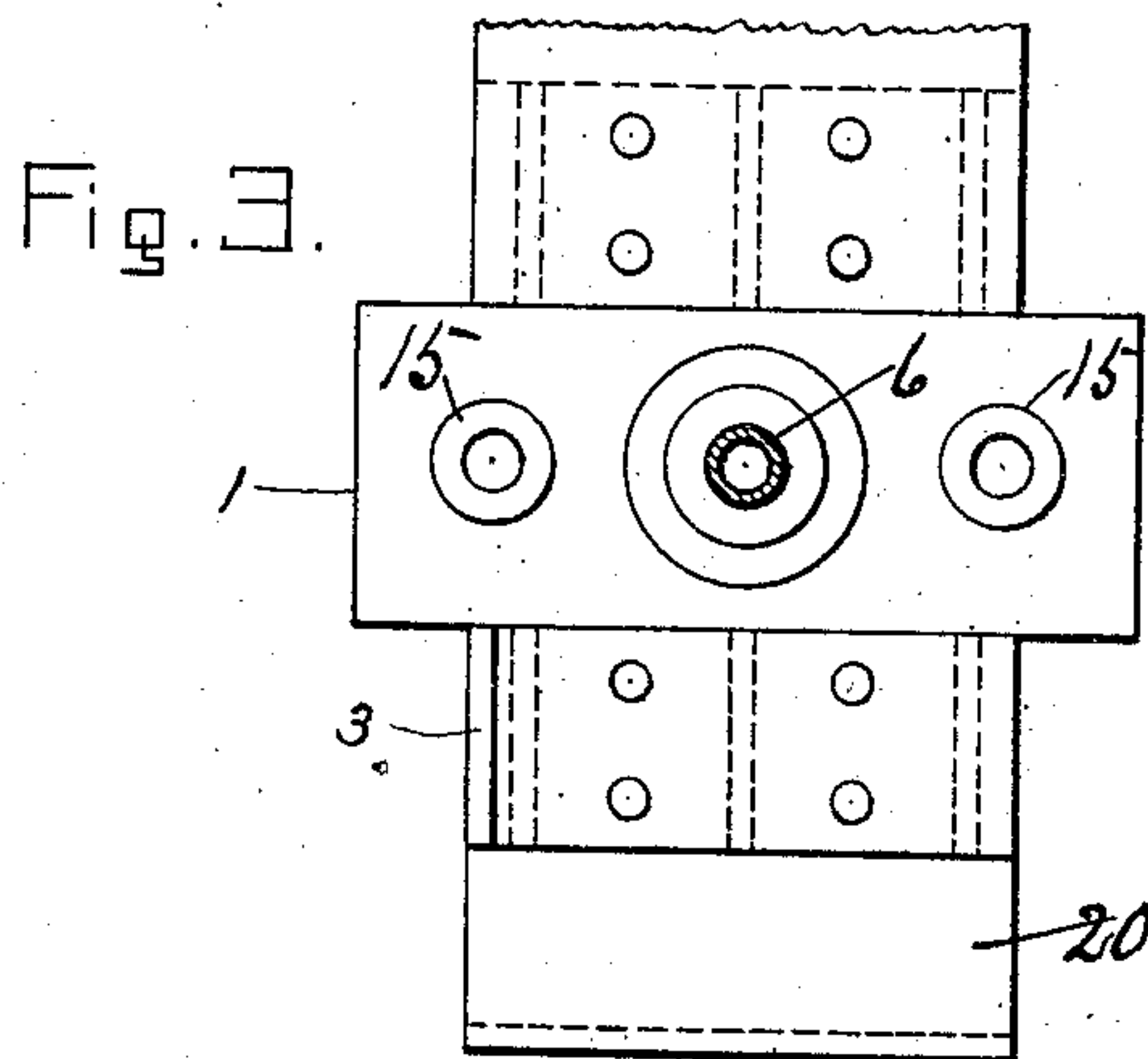
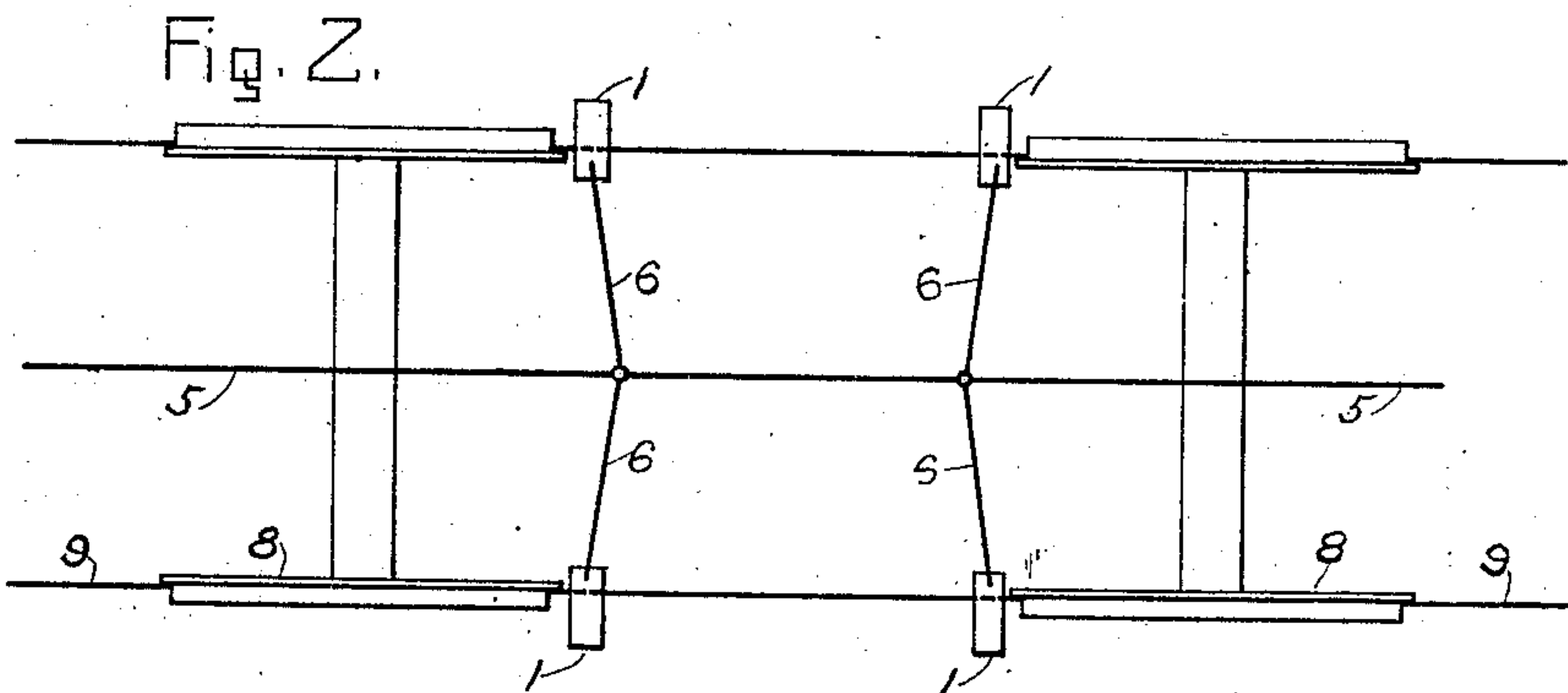
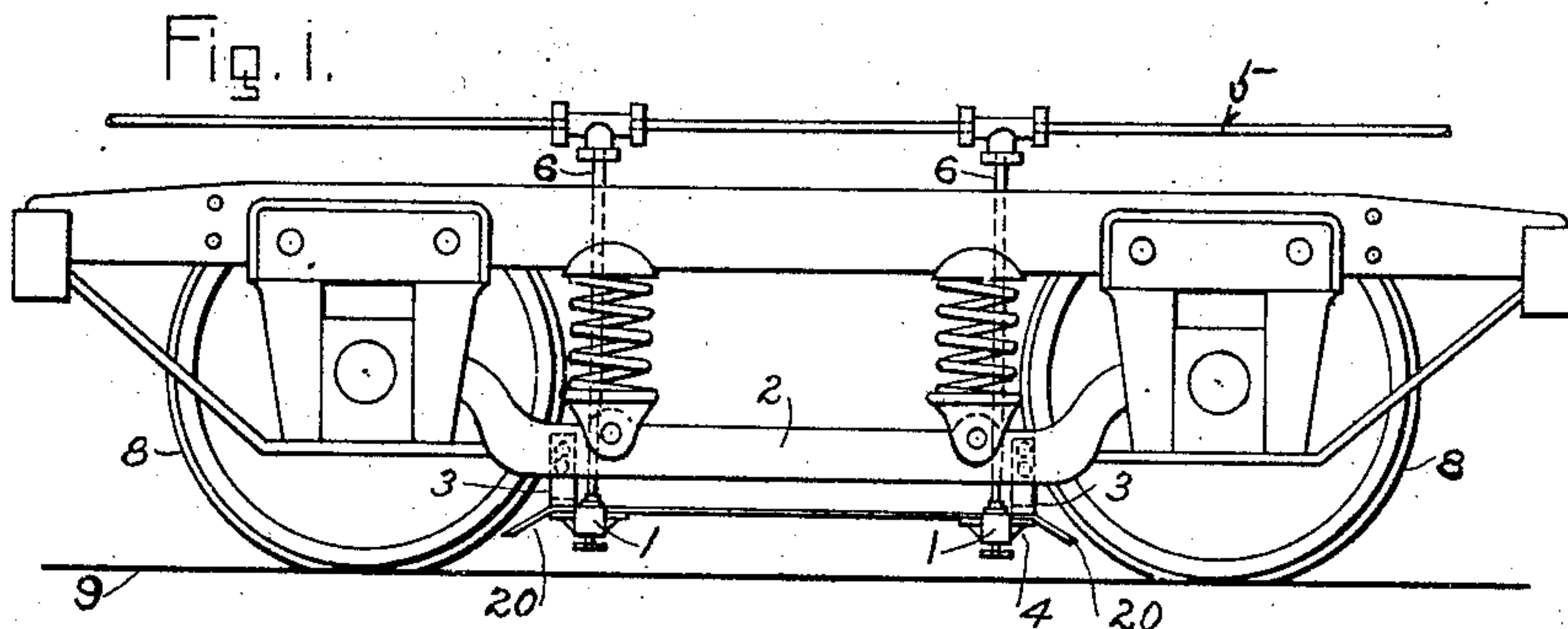


C. A. MARTINEZ.
EMERGENCY ATTACHMENT FOR RAILWAY CARS.
APPLICATION FILED NOV. 20, 1909.

997,459.

Patented July 11, 1911.

2 SHEETS—SHEET 1.



WITNESSES:

J. Donobach,
C. Bakeman.

INVENTOR

Cristobal A. Martinez

BY

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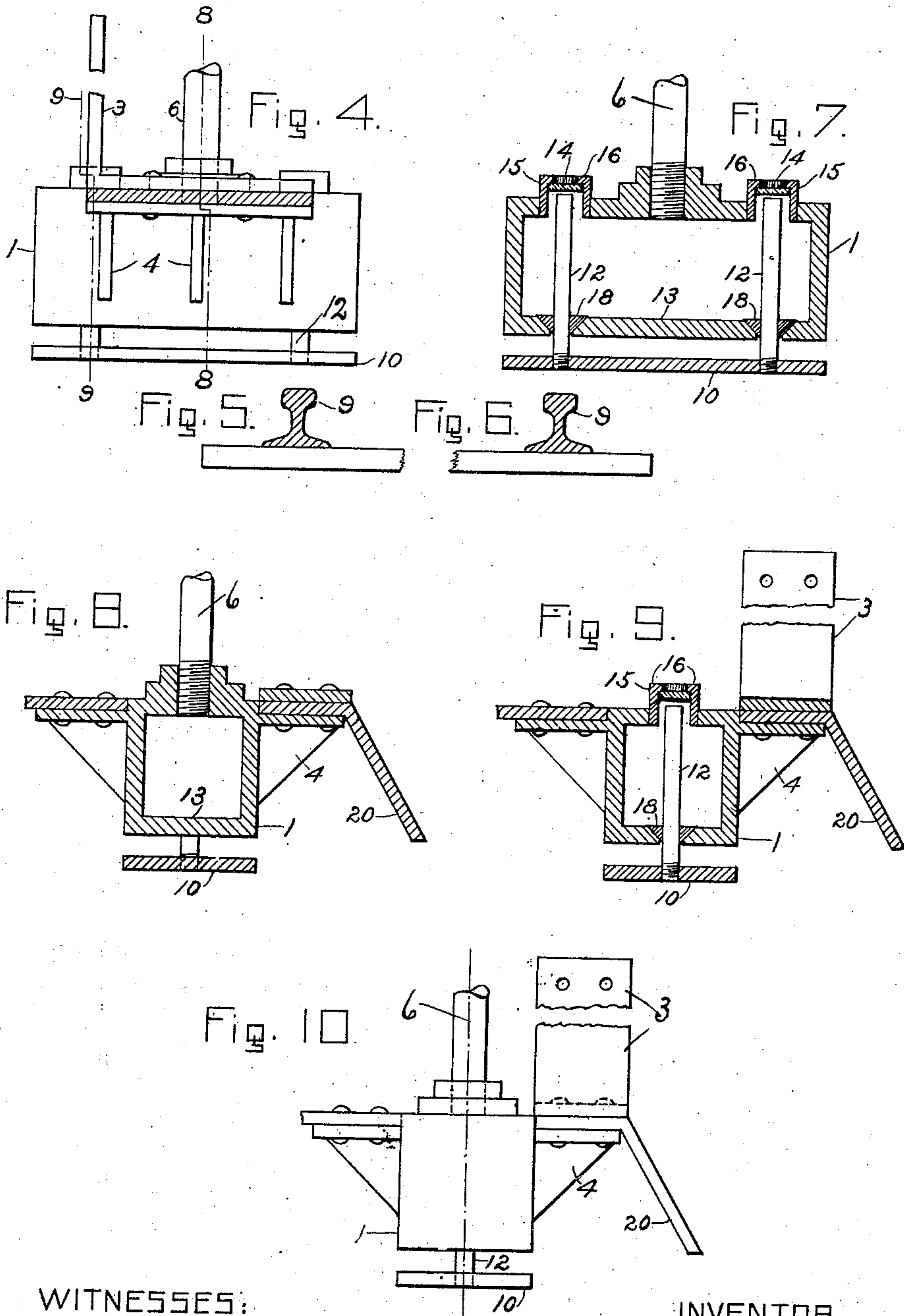
ATTORNEYS

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UNITED STATES PATENT OFFICE.

CRISTOBAL A. MARTINEZ, OF HACIENDA DE HORNOS, MEXICO.

EMERGENCY ATTACHMENT FOR RAILWAY-CARS.

997,459.

Specification of Letters Patent. Patented July 11, 1911.

Application filed November 20, 1909. Serial No. 529,013.

To all whom it may concern:

Be it known that I, CRISTOBAL A. MARTINEZ, a citizen of Mexico, residing at Hacienda de Hornos, State of Coahuila, Mexico, have invented certain new and useful Improvements in Emergency Attachments for Railway-Cars, of which the following is a specification.

The invention relates to such improvements and consists of the novel construction and combination of parts hereinafter described and subsequently claimed.

Reference may be had to the accompanying drawings, and the reference characters marked thereon, which form a part of this specification. Similar characters refer to similar parts in the several figures therein.

The object of the invention is to automatically set the brakes of a railway-car provided with an air-brake system, whenever the car is accidentally derailed.

The invention consists of an emergency attachment for railway-cars provided with an air-brake system comprising an air-receptacle connected with the supply-pipe of the air-brake system, and having a breakable wall-section and a movable member located just above and in close proximity to one of the car-supporting rails, and adapted when the car is derailed to be forced by the rail into engagement with the breakable section with sufficient force to break the same and afford a release-opening for the compressed-air within the air-supply pipe, as will be hereinafter more fully described and subsequently pointed out in the claims.

Figure 1 of the drawings is a view in side elevation of a car-truck provided with the improved attachment. Fig. 2 is a diagrammatic plan view showing the relative positions of four attachments and their connections with the main air-supply pipe of the air-brake system. Fig. 3 is a top plan view of one of the attachments detached. Fig. 4 is a side elevation made partly in section of the same. Figs. 5 and 6 are vertical cross-sectional views of the car-supporting rails, showing the relative positions of the rails and attachments. Fig. 7 is a vertical, central, longitudinal section of the same. Fig. 8 is a central, vertical section taken on the broken line 8—8 in Fig. 4, with a portion of the parts broken away. Fig. 9 is a vertical section taken on the broken line 9 in Fig. 4. Fig. 10 is an end elevation of the

part shown in Fig. 3. Figs. 3, 4, 5, 6, 7, 8, 9 and 10, are drawn upon an enlarged scale.

This emergency attachment is adapted to be applied to any vehicle designed to travel on track-rails and provided with an air-brake system. I have shown it applied, in Figs. 1 and 2, to the truck of a railway-car.

The attachment comprises an air-receptacle or box, 1, secured to the equalizing bar, 2, of the truck by means of the hanger, 3, bolted to such bar at its upper end, and at its lower end to the bracket, 4, projecting laterally from the box, 1, as seen in Figs. 1, 8, 9 and 10. When desired there may be a similar box or attachment secured to the truck in the neighborhood of each track-wheel, as shown in Fig. 2.

The line, 5, shown in Fig. 2, is the main air-supply pipe of the brake-system, and this pipe is connected by a pipe, line, 6, with each one of the air-boxes, 1, so that the boxes are normally filled with compressed air, being in connection with the main air-pipe. The wheels, 8, of the truck are shown resting upon the track-rail 9. The pipes, 6, are two of them shown connected up in Fig. 1, with the main air-supply pipe shown in that figure.

Each air-box is provided with a movable member comprising a cross-head, 10, provided with upright plungers, 12, passing through the bottom wall, 13, of the box, and in close proximity with the glass plates, 14, as shown in Figs. 7 and 9.

The thimbles, 15, inserted in the upper wall of the box are provided with an inwardly projecting flange, 16, adapted to form a bearing for each glass, which is held to its bearing-seat by the interior air-pressure.

The plungers, 12, are each provided with a conical valve, 18, adapted to tightly close the openings in the bottom wall of the box through which the plungers enter the box the valves 18, normally support the respective plungers 12, each with its inner end in close proximity to the glass 14.

The two plungers are shown connected by a common cross-head, 10, in Figs. 4 and 7.

It is obvious that a single plunger with a T-shaped head would in most cases serve the same purpose as the two plungers and the connecting cross-head, it only being necessary that the head of the plunger or plungers should be sufficiently extensive

to engage the subjacent track-rail, 9, in case the car-wheel neighboring such plunger should accidentally be derailed, in which case the plunger would be pushed inwardly against the glass with sufficient force to break it, and thereby permit the escape of compressed air from the box, thus acting automatically upon the air-brake system to set the brakes. The broken glass can afterward be readily replaced by an unbroken glass, and the box thus restored to operative condition for future use as an emergency attachment.

It is obvious that any breakable section may be substituted for the glass section.

It is also obvious that the invention is not limited to the exact manner shown for releasing the compressed air from the attachment box, it only being essential that the contact of the movable member with the rail should automatically release air from the box, by breakage of the breakable section.

When desired a depending bar or slab, 20, may be provided to protect the attachment from injury by any obstacle accidentally placed upon the track-rail, the depending bar serving to remove such obstacle and prevent contact of the box with the obstacle.

What I claim as new and desire to secure by Letters Patent is—

1. An emergency attachment, for railway-cars provided with an air-brake system, consisting of a compressed-air receptacle having a breakable wall-section and connected with the main supply-pipe of the air-brake system; a plunger movable through the wall of the air-receptacle to and from the breakable section, provided with a cross-head on its outer end and means for

normally supporting the plunger with its inner end in close proximity to the breakable section of the air-receptacle; and means for securing the attachment to a railway-car with the cross-head of the plunger extending transversely across the upper side of the car-supporting rail in close proximity thereto.

2. An emergency attachment, for railway-cars provided with an air-brake system, consisting of a compressed-air receptacle having a breakable and detachable wall-section and connected with the main supply-pipe of the air-brake system; and a movable member normally located vertically above the car-supporting rail, and in close proximity thereto, adapted to be forced into breaking engagement with the breakable section by the rail when the car-wheels leave the rail.

3. An emergency attachment, for railway-cars provided with an air-brake system, consisting of a compressed-air receptacle having a breakable wall-section and connected with the main supply-pipe of the air-brake system; a movable member normally located vertically above the car-supporting rail, and in close proximity thereto, adapted to be forced into breaking engagement with the breakable section by the rail when the car-wheels leave the rail; and a rigid and depending guard located in advance of the movable member.

In testimony whereof, I have heretunto set my hand this 8 day of November, 1909.

CRISTOBAL A. MARTINEZ.

Witnesses:

C. G. GROSVENOR,
JOHN SHERMAN.